

What Is Claimed Is:

1. An imaging sensor that is disposed in a vehicle, wherein the imaging sensor is configured in such a way that the imaging sensor monitors its functionality on the basis of an image signal.
2. The imaging sensor as recited in Claim 1, wherein the imaging sensor has an evaluation unit (13, 25, 33) that derives from the image signal at least one value that the evaluation unit (13, 25, 33) compares with at least one limit value in order to monitor the functionality.
3. The imaging sensor as recited in Claim 1 or 2, wherein the imaging sensor has an interface (15, 26, 37) which is configured in such a way that the functionality of the image sensor is transferred via the interface (15, 26, 37).
4. The imaging sensor as recited in one of the preceding claims, wherein the imaging sensor is configured in such a way that the imaging sensor generates the image signal on the basis of at least one invariant pattern.
5. The imaging sensor as recited in one of the preceding claims, wherein the imaging sensor is configured in such a way that the imaging sensor monitors its functionality on the basis of a profile of the image signal.
6. The imaging sensor as recited in one of the preceding claims, wherein the imaging sensor has at least two image-producing sensors (31, 32), the imaging sensor checking

its functionality by a comparison of the output signals of the at least two image-producing sensors (31, 32).

7. The imaging sensor as recited in one of the preceding claims,
wherein the imaging sensor is configured in such a way that the imaging sensor monitors its functionality during an initialization phase.
8. The imaging sensor as recited in one of the preceding claims,
wherein the imaging sensor is connectable to a diagnostic unit that activates the self-monitoring of the imaging sensor.
9. The imaging sensor as recited in one of the preceding claims,
wherein the imaging sensor is configured in such a way that the self-monitoring is manually activatable.
10. The imaging sensor as recited in one of the preceding claims,
wherein the imaging sensor is configured in depth-image-producing fashion.
11. The imaging sensor as recited in one of the preceding claims,
wherein the imaging sensor has means (36) for illumination.